

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: MEISEL, Karlheinrich  
Serial No.: 10/561,620  
Conf. No.: 9754  
Filed: March 6, 2007  
Title: **PAPER PRODUCTION WITH MODIFIED SILICA GELS AS MICROPARTICLES**  
Examiner: MINSKEY, Jacob T.  
Art Unit: 1791  
Docket No: BPD-0003

**VIA EFS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE**

Applicants acknowledge the Notice of Allowance for claims 2-9 and 16-19 and Examiner's Amendment dated January 11, 2010. With regard to the Examiner Telephonic Interview Summary (dated January 11, 2010) and the Examiner's Statement of Reasons for Allowance (dated January 11, 2010), Applicants have the following comments.

In an Examiner Initiated Telephonic Interview conducted on December 11, 2009, the Examiner indicated to Applicant's Representative (Ian J.S. Lodovice) that the claims 2-9 and 16-19 were allowable. Specifically, during the Examiner Initiated Telephonic Interview, the Examiner and Applicant's representative agreed that "The reason for allowance is that it has not been previously shown in the prior art to utilize a silica sol that contains either sulfonic acid groups or mercapto groups in the papermaking process where the cellulose is still in suspension." (see Examiner's Statement Of Reasons For Allowance, paragraph 4) In the interest of advancing prosecution and obtaining allowance of claims 2-9 and 16-19, Applicants agreed to cancel claims 10-15 and 20-23.

With regard to the additional comments made by the Examiner in the Examiner Telephonic Interview Summary and the Examiner's Statement Of Reasons For Allowance, Applicants respectfully *partially disagree* for the following reasons.

In the Examiner's statement for reasons for allowance, the Examiner stated:

The closest prior art (already of record) either utilizes a silica sol without the desired groups attached or *uses a silica sol with the desired groups for a noticeably different application* (paper coating or polymer treatment), and it would not have been obvious to one of ordinary skill in the art at the time of the invention to utilize the specified silica sol in the paper making process.

(Examiner's Statement Of Reasons For Allowance, paragraph 4., emphasis added) Applicants agree with the Examiners statement "the closest prior art (already of record) either utilizes a silica sol without the desired groups attached." However, Applicants strongly disagree with the Examiner's statement that "[t]he closest prior art (already of record) *uses a silica sol with the desired groups for a noticeably different application*." Specifically, **Applicants maintain that the prior art of record does not disclose silica sols with sulfonic acid groups.**

The prior art document of *Engle et al.* (US 5,888,290) discloses silica sols that have been modified with mercapto-substituted silanes. *Engle et al.* use the modified silica sols as intermediates to produce polymer-grafted, inorganic microparticles. *Engle et al.* do **not** disclose silica sols with sulfonic acid groups. Likewise, the other documents cited by the Examiner do not disclose silica sols with sulfonic acid groups. Thus, Applicants believe that silica sols with sulfonic acid groups are not known from the prior art of record.

Accordingly, the Applicants **partially disagree** with the Examiner's Statement, because the expression "*desired groups*" in the sentence bridging pages 2 and 3 encompasses both sulfonic acid groups and mercapto groups, and, as stated above, silica sols with sulfonic acid groups are not disclosed in the prior art of record.

Respectfully submitted,

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